

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF CALIFORNIA

POWER INTEGRATIONS, INC.,

No. C 09-5235 MMC

Plaintiff,

**ORDER CONSTRUING CLAIMS**

v.

FAIRCHILD SEMICONDUCTOR  
INTERNATIONAL, INC., et al.,

Defendants.

Before the Court is the parties' dispute regarding the proper construction of five terms in U.S. Patent 8,179,700 ("the '700 patent"). Plaintiff Power Integrations, Inc. ("Power Integrations") and defendants Fairchild Semiconductor International, Inc., Fairchild Semiconductor Corporation, and System General Corporation (collectively, "Fairchild") have submitted briefing and evidence in support of their respective positions. The matter came on regularly for hearing on April 22, 2013. Frank Everett Scherkenbach, Howard Glenn Pollack, Michael Richard Headley, and Neil Warren of Fish & Richardson P.C. appeared on behalf of Power Integrations. Blair M. Jacobs, Leigh John Martinson, and Christina Ann Ondrick of McDermott Will and Emery LLP appeared on behalf of Fairchild.

Having considered the papers submitted and the arguments of counsel, the Court

rules as follows.<sup>1</sup>

**1. “Minimum on time of the switching signal” (Claims 1, 8, 10, and 15)**

Fairchild proposes the term be construed as “minimum time that the pulse width of switching signal is on.”<sup>2</sup> Power Integrations proposes the term be construed as “the shortest permissible on time of the switching signal, i.e., a controlled time during which, once the switching signal is turned on, it is prevented from turning off.” Put another way, the parties’ dispute centers around whether the “minimum on time” is a period of time that simply happens, or whether it is required to happen.

The Court, for the reasons stated by Power Integrations, finds the “minimum on time” is mandated, and hereby construes “minimum on time of the switching signal” as “the shortest period of time that the switching signal is required to be on.”

**2. “Sampling a reflected voltage of the transformer” (Claims 1 and 15) / “sample a reflected voltage of the transformer” (Claim 8)**

Fairchild contends that no construction is required, and, in the alternative, proposes the terms be construed as “determining/determine the reflected voltage of the transformer.” Power Integrations proposes the terms be construed as “measuring and holding the value of a reflected voltage of the transformer.”

The Court, for the reasons stated by Power Integrations, hereby construes “sampling a reflected voltage of the transformer” (Claims 1 and 15) as “measuring and holding the value of a reflected voltage of the transformer” and “sample a reflected voltage of the transformer” (Claim 8) as “measure and hold the value of a reflected voltage of the transformer.”

**3. “Sample unit”**

Fairchild contends that no construction is required, and, in the alternative, proposes

---

<sup>1</sup> Where the Court has adopted a party’s proposed construction as to a term, the adopted construction is set forth below without further discussion.

<sup>2</sup> The parties’ respective constructions as set forth herein are taken from their “Amended Joint Construction and Prehearing Statement Pursuant to Patent Local Rule 4-3,” filed March 8, 2013.

1 the term be construed as “circuitry for sampling the reflected voltage.” Power Integrations  
2 proposes the term be construed as a means-plus-function limitation pursuant to 35 U.S.C.  
3 § 112, ¶ 6, and that the corresponding structure is “block 81 in Figure 8 and the associated  
4 text description in the specification (5:32-40, 6:15-25).”

5 The Court, for the reasons stated by Fairchild, finds “sample unit” is not subject to  
6 construction under 35 U.S.C. § 112, ¶ 6 and hereby construes “sample unit” as “circuitry for  
7 sampling the reflected voltage.”

8 **4. “Generating an adaptive signal correlated to an input voltage” (Claim 1)**

9 Fairchild contends that no construction is required, and, in the alternative, proposes  
10 the term be construed as “generating a signal that is adaptive and related to an input  
11 voltage.” Power Integrations proposes the term be construed as “providing a signal that is  
12 proportional to the value of the input voltage for use in adjusting the minimum on time.”

13 Although, the Court, for the reasons stated by Power Integrations, finds the signal is  
14 responsive to the input voltage, the Court, for the reasons stated by Fairchild, does not find  
15 the response must be “proportional.”

16 Accordingly, the Court hereby construes “generating an adaptive signal correlated to  
17 an input voltage” as “generating a signal that changes in response to changes in the input  
18 voltage.”

19 **5. “Coupled to receive a current sense signal of the power converter and  
20 generates the switching signal in response to the current sense signal”  
(Claims 6 and 13)**


21 Fairchild contends that no construction is required, and, in the alternative, proposes  
22 the term be construed as “directly or indirectly connected to receive a current sense signal  
23 of the power converter and generates the switching signal in response to the current sense  
24 signal.” Power Integrations proposes the term be construed as “coupled to receive a signal  
25 which is proportional to the value of the primary side switching current and using that signal  
26 to regulate the output of the power converter by controlling the on-time of the switching  
27 signal.”  
28

1 For the reasons stated by Power Integrations, the Court finds “current sense signal”  
2 means a signal that is “proportional to the value of the primary side switching circuit.”  
3 Additionally, the Court agrees with Fairchild that “coupled to” means “directly or indirectly  
4 connected to.” Further, as Fairchild points out, the phrase “using that signal to regulate the  
5 output of the power converter by controlling the on-time of the switching signal” is  
6 superfluous. In particular, the function of the “switching signal” in dependant Claims 6 and  
7 13 is described in independent Claims 1 and 8. (See ‘700 Patent, col. 6:46-49 (describing  
8 a “switching signal to control the switch and to regulate the output of the power converter”);  
9 id. col. 7:37-38 (describing “a switching signal to control the switch”).)

10 Accordingly, the Court hereby construes “coupled to receive a current sense signal  
11 of the power converter and generates the switching signal in response to the current sense  
12 signal” as “directly or indirectly connected to receive a signal which is proportional to the  
13 value of the primary side switching current and, in response to that signal, generates the  
14 switching signal.”

15 **IT IS SO ORDERED.**

16  
17 Dated: May 6, 2013

18   
19 MAXINE M. CHESNEY  
20 United States District Judge  
21  
22  
23  
24  
25  
26  
27  
28